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PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/533,685
Filing Date: March 23, 2000
Appellant(s): HEARN, MICHAEL LEE

MAILED
SEP 27 2007
GROUP 3700

Cary Kappel
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 23 July 07 appealing from the Office action mailed 25 October 06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct, with two minor corrections.

The rejection of claims 22,26,33 by Bussey III, et al. is under 35 USC 102(e), not 102(b) –(Examiner made the same error in the final rejection).

The rejection of claims 23,27,29,34,37,40 by Marcus. Wolfberg, Henc Sauer and Brown identifies the wrong Brown reference. Applicant lists Brown (2,951,410) but actually it is Brown (5,359,914).

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-----------|--------------------|-------------------|
| 2,951,410 | Brown | 06 September 1960 |
| 3,119,312 | Henc | 28 January 1964 |
| 3,522,762 | Sauer | 04 August 1970 |
| 3,866,497 | Wolfberg et al. | 18 February 1975 |
| 3,921,481 | Marcus | 25 November 1975 |
| 4,142,431 | Jespersion | 06 March 1979 |
| 5,359,914 | Brown | 01 November 1994 |
| 5,967,512 | Irsik | 19 October 1999 |
| 6,418,827 | Bussey, III et al. | 16 July 2002 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

102e - Bussey

Claims 22,26 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Bussey, III et al.'827, who shows a perforating device in figure 4 having all of the recited limitations including a first cylinder (51) having a first segmented blade (52 or 52').

As seen in figure 4, the nipping surface (surface of roller 51) extends from the sides of the blade.

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Also shown is a first anvil cylinder (45) made of bristles. Note in figure 4 that the bristles press against the web, and thus Bussey meets the requirement for compressing the web as set forth in the board decision.

In regards to claim 26, the cutting cylinder is a two-part metallic hub as seen in figure 8, with an inner part and an outer part.

102b - Wolfberg

Claims 22,26,28,30,33 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfberg et al.'497, who shows a perforating device in figure 10 having all of the recited limitations including a first cylinder (112) having a first and second segmented blade (114) and a second cylinder (104) having another segmented blade (108).

As seen in figure 10 the nipping surface (surface of roller 114) extends from the sides of the blade.

Also shown is a first anvil cylinder (116) and a second anvil cylinder (106). Note in figure 10 that the anvils and cutting cylinders contact the web being cut. The device is CAPABLE of receiving web thicker than that shown. Any web thicker than that shown would inherently be compressed and gripped as it passes thru, and thus Wolfberg has the structure to meet the requirement for compressing the web as set forth in the board decision. Applicant is reminded that Wolfberg need not disclose this intended use step for compressing the web, he need merely show the structure capable of performing it. MPEP 2111.02 has an excellent discussion on how intended use statements (e.g.

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compressing a web) must be given weight as structure but not given weight as a method step. Perhaps the best example is the *Schreiber* case, where an oil can was successfully used to reject a popcorn dispenser based on CAPABILITY, even though there was zero suggestion to dispense popcorn. Likewise, Wolfberg is CAPABLE of compressing a web of certain thickness at the nip, even though there is no suggestion to do so. Also worth reading is MPEP 2114 "MANNER OF OPERATING DEVICE DOES NOT DIFFERENTIATE APARATUS CLAIM FROM THE PRIOR ART".

Examiner notes that the Board has overturned a previous 102 rejection by Wolfberg. However, the Board has not considered the claims as now amended, and the board also has not seen the new interpretation based on capability.

In regards to claims 26 and 28, the cutting cylinders and anvils are both two-part metallic hubs. Each has a left part and a right part.

103 – Brown '410, Jespersion

Claims 22,26,28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown '410 in view of Jespersion '431.

Brown shows a cutter with most of the recited limitations including a first cutting roller (16) having a blade (94) that extends past the nipping surface.

Also shown is a first anvil cylinder (18). The cutter and anvil are drawn together by springs, so Brown meets the requirement for compressing the web as set forth in the board decision.

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In regards to claims 26 and 28, the cutting cylinder has at least two metal parts as seen in figure 11 and the anvil has at least two metal parts as seen in figure 11.

Brown's blade is not a perforating blade with spaced cutting edges. However, it is well known for dispensers of this type to employ perforating blades so that the product hangs on, ready to be ripped off by a user when needed. An example of this is the patent to Jespersen (138, figure 2). It would have been obvious to one of ordinary skill in the art to have modified Brown by making his blade a perforating blade, as taught by Jespersen, so that the cut product would hang on until needed by the user.

103 – Marcus, Wolfberg

Claims 22,26,28,30,33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus '481 in view of Wolfberg et al.'497.

Marcus shows a cutter with most of the recited limitations including a first cutting roller (14) having a blade (34) that extends past the nipping surface (40,46). Note that surfaces 40 and 46 do extend circumferentially to a small extent, and that the claims do not require they extend all the way around the cylinder.

Also shown is a first anvil cylinder (12). The web is compressed by the resiliency of the nipping surface (40,46), so Marcus meets the requirement for compressing the web as set forth in the board decision.

Marcus's blade is not a perforating blade with spaced cutting edges. However, it is well known for machines of this type to employ perforating blades so that a large numbers of products can be folded together, shipped, and later run through a machine

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while still attached together, and yet provide easy separation by the end user. An example of this is the patent to Wolfberg. It would have been obvious to one of ordinary skill in the art to have modified Marcus by making his blade a perforating blade, as taught by Wolfberg, so that the cut products could be shipped together and run through other machines and still be easily separated by the end user.

In regards to claim 36, Marcus does not show a second cutting cylinder and second anvil. However, this is well known as shown by Wolfberg. It would have been obvious to one of ordinary skill in the art to have provided Marcus with a second cutting cylinder and second anvil, as taught by Wolfberg, in order to increase the number of perforations one can make, and to increase the flexibility in where the perforations can be placed on the web.

In regards to claims 26 and 28, the cutting cylinder and anvil are both two-part metallic hubs. Each has a left part and a right part.

103 – Bussey, Henc, Sauer

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bussey III et al.'827 in view of Henc '312 or Sauer '762.

If it is argued that Bussey's cutting cylinder is not a "two piece metallic hub", then Examiner notes that this is common in the art. For example, see Henc '312 or Sauer '762. It would have been obvious to one of ordinary skill in the art to have modified Bussey by making the cutting cylinder be a "two piece metallic hub", as taught by Henc

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and Sauer and many others, in order to be able to assemble them about their shafts without having to remove the shaft from it's bearing set.

103 – Wolfberg, Henc, Sauer

Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfberg et al.'497 in view of Henc '312 or Sauer '762.

If it is argued that Wolfberg's cutting cylinder and anvil are not "two piece metallic hubs", then Examiner notes that this is common in the art. For example, see Henc '312 or Sauer '762. It would have been obvious to one of ordinary skill in the art to have modified Wolfberg by making the cutting cylinder and anvil be "two piece metallic hubs", as taught by Henc and Sauer and many others, in order to be able to assemble them about their shafts without having to remove the shaft from it's bearing set.

103 – Marcus, Wolfberg, Henc, Sauer

Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus '481 in view of Wolfberg et al.'497 and further in view of Henc '312 or Sauer '762.

If it is argued that Marcus's cutting cylinder and anvil are not "two piece metallic hubs", then Examiner notes that this is common in the art. For example, see Henc '312 or Sauer '762. It would have been obvious to one of ordinary skill in the art to have modified Marcus by making the cutting cylinder and anvil be "two piece metallic hubs",

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as taught by Henc and Sauer and many others, in order to be able to assemble them about their shafts without having to remove the shaft from it's bearing set.

103 – Brown '410, Jespersen, Henc, Sauer

Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown '410 in view of Jespersen '431 and further in view of Henc '312 or Sauer '762.

If it is argued that Brown's cutting cylinder and anvil are not "two piece metallic hubs", then Examiner notes that this is common in the art. For example, see Henc '312 or Sauer '762. It would have been obvious to one of ordinary skill in the art to have modified Brown by making the cutting cylinder and anvil be "two piece metallic hubs", as taught by Henc and Sauer and many others, in order to be able to assemble them about their shafts without having to remove the shaft from it's bearing set.

103 – Marcus, Wolfberg, Henc, Sauer, Brown '914.

Claims 23,27,29,34,37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus '481 in view of Wolfberg et al.'497 (with or with Henc '312 and Sauer '762) and further in view of Brown '914.

Marcus's stripper (40,46) is made from rubber materials (lines 27-30, column 5). However, it is well known for strippers like this to be made from urethane, as exemplified by Brown. It would have been obvious to one of ordinary skill in the art to have made

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Marcus's stripper out of urethane, as taught by Brown, since it is an art recognized equivalent known for the same purpose.

103 – Marcus, Wolfberg, Henc, Sauer, Kirkpatrick

Claims 24,25,35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus '481 in view of Wolfberg et al.'497 (with or with Henc '312 and Sauer '762) and further in view of Kirkpatrick, Jr. et al.'069.

Marcus's anvil is not a continuous layer of urethane. However, this is an extremely common feature. Hundreds of references can be pulled showing urethane covered anvil rollers. For example, see Kirkpatrick (lines 52,53, column 3). It would have been obvious to one of ordinary skill in the art to have further modified Marcus by making the anvil of the type taught by Kirkpatrick, since urethane covered anvils have high cut and tear resistance as well as healing properties (again, Kirkpatrick's lines 52,53, column 3).

103 – Brown '410, Jespersen, Henc, Sauer, Irsik

Claims 23,24,27,29,34,35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown '410 in view of Jespersen '431 (with or without Henc '312 and Sauer '762) and further in view of Irsik '512.

Brown, as modified, shows a cutter with all of the recited limitations except the 1st cutting cylinder nipping surface is not mentioned to be urethane. On line 47 of column 3, Brown states that the surfaces should be "*rubber or resilient matrix*". The purpose of

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Brown's surface is clearly to facilitate advancement of the material. The courts have long held that it is obvious to select a material based upon its known qualities. In this case, Irsik shows that it is well known for cylinders to employ urethane (line 22, column 3) for its nip surfaces (30,32). It would have been obvious to one of ordinary skill in the art to have modified Brown by making the nipping surface out of urethane, as taught by Irsik, in order to firmly advance the material and also accommodate different thickness materials (Irsik's lines 24,25, column 3). Since this urethane is clearly resilient, it would also perform Brown's desired functions.

(10) Response to Argument

102e – Bussey

Appellant argues that Bussey's roller 45 is not an anvil cylinder. Firstly, Examiner notes that Applicant's specification gives no special meaning to the term "anvil cylinder". Secondly, brush cylinders are common in the art, and are frequently referred to as anvils. An example of this is the patent to Smythe (3,604,302), titled "brush anvil". This is the first time Examiner has mentioned Smythe, and this is only because Appellant has now raised this argument for the first time. Examiner is not necessarily saying Smythe is partaking in the rejection. Smythe is merely brought in to help the board establish that the examiner is using proper terminology when calling Bussey's roller (45) an "anvil roller".

Appellant further argues that Bussey's roller (45) does not have a "nipping surface". Appellant has defined a "nip" as *"a location where the web is squeezed or*

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compressed together so that the web in the nip does not slip or move with respect to the cylinder". As seen in Bussey's figure 4, the roller (45) is deformed at the nip, and thus it is clear that it exerts a compressive force on the web. Since Bussey's roller surface performs the exact same function as Appellants roller surface, the surface of the Bussey's roller that defines this nip should also be considered a "nipping surface". At no point in the specification does Appellant give the term "nipping surface" any definition that precludes it being made of tightly packed bristles.

In regards to claims 26, Appellant argues that Bussey's cutting cylinder (51) is not a "two part metallic hub". However, looking at Bussey's figure 8, we can see that the cross-hatching clearly refers to metal (see MPEP 608.02), and that it has two parts (an inner part and an outer part). Furthermore, the claims never establish that the parts are separable, Bussey's hub could also be said to have a left part and a right part.

102b - Wolfberg

This case has visited the Board of appeals before (on 18 January 06), and at that time, a 102b rejection by Wolfberg was overturned. Appellant now argues that the office is estopped from ever presenting Wolfberg as a 102b reference again. This position is incorrect, since Appellant has since amended the claims, so that the situation is somewhat different from last time. Appellant further argues that *"the exact same arguments in the previous appeal are presented again"*. This is incorrect, since the Examiner has a new interpretation of Wolfberg based upon his *capabilities* of compressing the web at the nip.

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Appellant argues that Wolfberg does not disclose a "nipping surface" as claimed. Appellant has defined a "nip" as *"a location where the web is squeezed or compressed together so that the web in the nip does not slip or move with respect to the cylinder"*. The step of squeezing the web is an intended use, and Examiner is not permitted to import this as a method step into an apparatus claim. However, Examiner will give this special definition of "nip" full weight inasmuch as the prior art must have structure capable of performing that function. Attention is drawn to MPEP 2114 APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART. In this case, even using Appellant's special definition of "nip", there is zero structural difference between Wolfberg and the rejected claims, since Wolfberg is capable of squeezing an extra thick web as it travels through. Further attention is drawn to MPEP 2115 MATERIAL OR ARTICLE WORKED UPON DOES NOT LIMIT APPARATUS CLAIMS. Since Appellant has not claimed the workpiece in combination with the cutter, Examiner cannot give weight to the workpiece being a certain thickness. Accordingly, Examiner must consider whether Wolfberg squeezes the web for *any* given thickness of web. As seen clearly in Wolfberg's drawings, a web above a certain thickness will most definitely be squeezed, and thus Wolfberg has structure that meets Appellant's special definition of a nip.

If the Wolfberg rejection was overturned at this point and the case passed to issue, manufacturers of similar devices would not be able to tell if their device infringed or not, because they would be selling it without the web. If the thickness of the web is

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not known, then it is not known whether the web would be squeezed, and therefor it is not known if the claim reads thereon.

103 – Brown '410, Jesperson

Appellant argues that there is no reason to make Brown's blade segmented. In other words, to go from a straight blade to a perforating blade.

While Jesperson shows a perforating blade, Appellant argues that there is no reason to modify Brown with Jesperson. Appellant provides zero rationale as to why not.

On the contrary, the Jesperson reference was carefully selected from amongst hundreds of perforating blade references because he expresses such a clear motivation. Many web dispensers (such as Brown), simply dispense and let the cut web fall. Jesperson advances the web, makes a perforation cut, and lets the perforated web *hang*. The web can hang there until the user is ready to use it. From this we can see that Brown would benefit from perforating instead of cutting all the way thru, so that the product web can hang there in an easy-to-grab position, until the user is ready for it. The fact that Brown is a tape dispenser and Jesperson is a perforator does nothing to tarnish this valuable teaching. The ability to grab a pre-dispensed perforated tape is highly analogous, and equally beneficial to grabbing a pre-dispensed perforated paper towel.

103 – Marcus, Wolfberg

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Appellant argues that Marcus' cutting cylinder does not have a nipping surface.

Appellant defines "nip" as *"a location where the web is squeezed or compressed together so that the web in the nip does not slip or move with respect to the cylinder"*.

As seen in Marcus' figure 2, the surface 44a presses resiliently against the web 52, and therefor squeezes the web. Accordingly, by Applicant's own definition, Marcus' surface 44a should be considered a "nipping surface", and the surface on the anvil opposing surface 44a gives an opposing squeezing force and also should be considered a nipping surface.

Appellant argues that Marcus' nipping surface does not extend circumferentially. However, Examiner is required to give terms their broadest reasonable interpretation as per MPEP 2111. It is deemed that to "extend circumferentially", an object must have an extent along the periphery of the roller. Marcus' nipping surface (44a) does extend along the periphery a short distance, and so it is deemed that it "extends circumferentially". Appellant has given no special definition for this term, and there is nothing in the claims nor specification that would preclude surfaces that did not go all the way around the roller.

Appellant argues that there is no reason to make Marcus' blade segmented. In other words, to go from a straight blade to a perforating blade.

While Wolfberg shows a perforating blade, Appellant argues that there is no reason to modify Marcus with Wolfberg.

Similar to the above situation, Wolfberg was selected from amongst hundred's of perforating blade patents for the sole reason that he does provide a motivation. In this

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case, Wolfberg makes clear that he employs perforating blades so that a large number of products can be folded together, shipped, and later run through another machine (such as a printer) while still attached together, and yet provide easy separation by the end user (see Wolfberg's lines 43-49 of column 1). From this, it is easy to see the benefits of making Marcus' blade a perforating blade.

In regards to claim 36, Appellant argues that there is no motivation to add a second cutting cylinder and anvil, even though Wolfberg teaches such. Again, Wolfberg was carefully selected in this regard because he *does* provide a motivation, namely the ability to add perforations at variable locations (see Wolfberg's lines 20-35 of column 8). This enables the end user to separate the final product into smaller pieces, or even pieces of different sizes.

103 – Bussey, Henc, Sauer

Appellant argues that there is no motivation to make Bussey's hub of the separable two parts as taught by Henc or Sauer. However, one can easily see that the function of Henc and Sauer's two-part hub is that it enables one to assemble the hub onto the shaft, even if both ends of the shaft are held in bulky bearings. This easy assembly enables quicker replacement of broken rollers, or changeovers to different types of rollers.

103 – Wolfberg, Henc, Sauer

Appellant argues that there is no motivation to makes Wolfberg's hub of the separable two parts as taught by Henc or Sauer. As above, one can easily see that the function of Henc and Sauer's two-part hub is that it enables one to assembly the hub onto the shaft, even if both ends of the shaft are held in bulky bearings. This easy assembly enables quicker replacement of broken rollers, or changeovers to different types of rollers.

103 – Marcus, Wolfberg, Henc, Sauer

Appellant argues that there is no motivation to makes Marcus' hub of the separable two parts as taught by Henc or Sauer. Similar to before, one can easily see that the function of Henc and Sauer's two-part hub is that it enables one to assembly the hub onto the shaft, even if both ends of the shaft are held in bulky bearings. This easy assembly enables quicker replacement of broken rollers, or changeovers to different types of rollers.

103 – Brown '410, Jespersen, Henc, Sauer

Appellant argues that there is no motivation to makes Brown's hub of the separable two parts as taught by Henc or Sauer. Once again, one can easily see that the function of Henc and Sauer's two-part hub is that it enables one to assembly the hub onto the shaft, even if both ends of the shaft are held in bulky bearings. This easy assembly enables quicker replacement of broken rollers, or changeovers to different types of rollers.

103 – Marcus, Wolfberg, Henc, Sauer, Brown '914

Appellant argues that there is no motivation to make Marcus' surface 44a out of urethane, even though Brown teaches as much. However, since both Marcus (using rubber) and Brown (using urethane) both have the same purpose of depressing during cutting and then pushing back to help the cut product separate from the blade, these two materials are considered to be art recognized equivalents known for the same purpose. Attention is drawn to MPEP 2144.06 SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE. Examiner clips the end section here;

Smith v. Hayashi, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (The mere fact that phthalocyanine and selenium function as equivalent photoconductors in the claimed environment was not sufficient to establish that one would have been obvious over the other. However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). 2144.07.

This situation is very similar to the Smith v. Hayashi case, but replace "phthalocyanine and selenium" with "rubber and urethane", and then replace

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"electrophotographic environment as a photoconductor" with "cutting machine for stripping cut products". Note that no express suggestion is required.

103 – Marcus, Wolfberg, Henc, Sauer, Kirkpatrick

Appellant argues that Marcus has no need of a urethane anvil. On the contrary, Kirkpatrick makes urethane covered anvils look very attractive, with high cut and tear resistance as well as healing properties (Kirkpatrick's lines 52,53, column 3). Appellant has ignored these clear motivations.

103 – Brown '410, Jespersen, Henc, Sauer, Irsik

Appellant argues that there is no motivation for Brown to make his nipping surface out of urethane. On the contrary, Irsik makes urethane covered rollers look very attractive, with the ability to firmly advance the material and also accommodate different thickness materials (Irsik's lines 24,25, column 3). Appellant has ignored these clear motivations.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

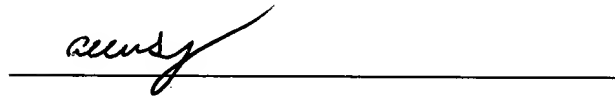
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